

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0002] with the following amended paragraph:

[0002] A friction clutch of the type to which the present invention pertains normally includes a diaphragm spring or a Belleville spring that is tiltably mounted in a rotary housing in such away that it must share the angular movements of the housing but has limited freedom of axial movement relative thereto. The pressure plate cooperates with a counterpressure plate, such as a ~~freewheel~~ flywheel that rotates with the housing and cooperates with the pressure plate, to clamp, with or without slippage, the friction linings of a so-called clutch plate or clutch disc when the clutch is engaged, either entirely or in part (that is, without or with slip between the pressure plate and the counterpressure plate on the one hand, and the clutch disc on the other hand). The counterpressure plate can receive torque from the rotary output element of a prime mover to rotate the housing and the pressure plate, and the clutch disc can drive the rotary input element of the gearbox when the clutch is at least partially engaged.

Please replace paragraph [0004] with the following amended paragraph:

[0004] Friction clutches of the type to which the present invention pertains are designed in such away that at least a portion of the closing or engaging force that determines the magnitude of transmittable torque is introduced into the clutch from the outside by the diaphragm spring. The diaphragm spring preferably includes a ring-shaped main or primary portion of variable conicity, and actuating levers in the form of prongs or tongues that extend from the radially inner side of the main portion. Such

prongs can be and preferably are of one piece with the main portion of the diaphragm spring.

Please replace paragraph [0043] with the following amended paragraph:

[0043] A ring-shaped, radially outer portion 15 of the diaphragm spring 10 is located radially outwardly of the main portion 11 and is tiltable relative to the housing 2. The conicity of the diaphragm spring 10 changes when its prongs 13 are depressed by the clutch actuating means 14, because that action causes the diaphragm spring to pivot at outer portion 15 relative to the housing 2. A fulcrum for the portion 15 of the diaphragm spring 10 is defined by a first fulcrum 16 that is provided on a spring-like resilient sensor 17 and by a second fulcrum 18 that is provided on a ring-shaped component 49 18a carried by housing 2. In the embodiment of Fig. 1, the first fulcrum 16 is part of the resilient sensor 17 that is a diaphragm spring. The latter includes a ring-shaped resilient main portion 19 that is provided with radially outwardly extending arms 20 abutting the adjacent portions of the housing 2 (as seen in the axial direction of the friction clutch 1) in such away that the sensor 17 is maintained in a stressed condition. The second fulcrum 18 is constituted by the component 49 18a. Because of axial stressing of the diaphragm spring or sensor 17, the ring-shaped portion 15 of the diaphragm spring 10 is clamped axially between the two ring-shaped fulcra 16 and 18.

Please replace paragraph [0044] with the following amended paragraph:

[0044] The sensor 17 and the fulcrum 18 form part of a wear compensating device 21 that serves to ensure that, in spite of eventual wear at least upon the friction linings 6, the stressing of the diaphragm spring 10 remains at least substantially constant, at least when the friction clutch 1 is disengaged. That is ensured in that the wear compensating device 21 causes an axial displacement of the diaphragm spring 10 to an extent corresponding with the wear of at least the friction linings 6. Such axial displacement of the diaphragm spring 10 takes place axially of the friction clutch 1, in a direction toward the friction linings 6 and the counterpressure plate 5. That results in elastic deformation of the sensor 17 to an extent corresponding to the axial displacement of the diaphragm spring 10. The latter tends to move away from the bottom wall (the right-hand wall as viewed in Fig. 1) of the housing 2. To that end, the ring-shaped component ~~19~~ 18a is provided with a ring-shaped (circumferentially extending) array of ramps 22 that slope axially of the clutch 1 and abut complementary ramps 23. The ramps 22 form integral parts of the resilient main portion 19 of the sensor 17, and the ramps 23 are integral parts of the housing 2. Additional details of the construction and mode of operation of the wear compensating device 21 are disclosed and illustrated in the aforementioned prior publications, the entire disclosure of each of which is hereby incorporated by reference.

Please replace paragraph [0047] with the following amended paragraph:

[0047] The just-discussed ~~plane~~ planar or flat shape of main portion 11 of the diaphragm spring 10 in unstressed condition of the friction clutch of Figs. 1 and 2 is achieved in that the diaphragm spring is held on the pressure plate 3 in an elastically

deformed condition. To that end, the diaphragm spring 10 engages on the one hand a ring -shaped abutment 25 that is provided on the pressure plate 3 and, on the other hand, bears axially against a biasing device or biasing means 26. The illustrated ring-shaped abutment 25 is composed of an annular array of discrete projections or lobes 27 of the pressure plate 3. On the other hand, the biasing device 26 includes rivets that are affixed to the pressure plate 3 and have shanks 28 extending axially through holes or openings that are provided between (i.e., adjacent) the tongues 12 of the diaphragm spring 10. The rivets of the biasing device 26 include round heads 29 located at that side of the diaphragm spring 10 that faces away from the pressure plate 3, and that serve as axial propping means for portions of the tongues 12. Fig. 1 shows that the annular array of lobes 27 that form the abutment 25 is smaller than the fulcrum 15. Furthermore, the diameter at the biasing device 26 is smaller than that at the ring-shaped abutment 25 on the pressure plate 3 for the diaphragm spring 10.

Please replace paragraph [0050] with the following amended paragraph:

[0050] During a normal actuation of the clutch 1, namely of a clutch containing intact friction linings 6 that are at least substantially devoid of wear (that normally denotes that other parts - such as the pressure plate 3 and the counterpressure plate 5 - are also new, in the sense that their wear is nil or negligible), the application of pressure to the tips 13 of the tongues 12 by way of the actuating device 14 entails a shifting of the tips 13 axially of the clutch 1 toward the friction linings 6, the pressure plate 3 and the counterpressure plate 5. The diaphragm spring 10 is tilted at the ring-shaped ~~fulcrum~~ portion 15 and its conicity changes. The result is that the diaphragm

spring 10 shifts the pressure plate 3 axially at the ring-shaped abutment 25, toward the counterpressure plate 5, and to an extent that is dependent upon the selected leverage or mechanical advantage. Once a certain existing clearance or play is eliminated, the friction linings 6 of the clutch disc 7 are clamped between the friction surfaces of the plates 3 and 5. In addition, the resilient back support 9 between the two friction linings 6 undergoes gradual compression, with the result that the torque that is being transmitted by the clutch 1 increases gradually up to the maximum value that the clutch can transmit. At such time, the resilient back support 9 cannot yield any more, i.e., it has undergone maximum elastic compression and acts not unlike a solid block. In other words, the friction linings 6 and the resilient back support 9 on the clutch disc 7 jointly constitute a rigid body that maintains the plates 3, 5 at a predetermined minimal axial distance from each other and is in maximum frictional engagement therewith.

Please replace paragraph [0063] with the following amended paragraph:

[0063] The pressure plate 3 403 carries a prestressed diaphragm spring 410 having a ring-shaped main portion 411 that includes radially outer parts or sections 411a abutting a ring-shaped member 418 that serves as a fulcrum and is axially separated from the cover or lid of the housing 402 by a wear compensating unit 421. The unit 421 serves to automatically compensate for wear of at least some (such as the friction linings 406) of the parts that undergo wear in actual use of the friction clutch 401, and includes at least one set of ramps that cause the pressure plate 403 to move incrementally toward the counterpressure plate 405 (i.e., away from the lid of the

housing 402) as the wear of the friction linings 406 (and certain other parts of the clutch 401) progresses. In the embodiment of Fig. 7, the diaphragm spring 410 is again provided with integral additional resilient elements in the form of tongues 412a that serve the same purpose as the tensioning or clamping tongues 112a of the median portion 111 of the diaphragm spring 110 in the friction clutch shown in Fig. 3.